Application No. 10/619,735
Response Dated February 14, 2007
Reply to Office Action of November 16, 2006

Amendment to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of claims:

1-24 (Canceled)

25. (Withdrawn) A method of determining qualities of reagents used in an assay, comprising:

a) providing a device comprising a plurality of quality control compounds, wherein each of said control compounds is reactive with one of said reagents used in said assay; and a substrate, wherein each of said control compounds is bound on a plurality of spatially defined sites on said substrate, and wherein each of said defined sites contains a different amount of one of said control compounds;

b) contacting said reagents with said substrate; and

c) assessing an extent of reaction of at least one of said reagents with one of said control compounds on said plurality of spatially defined sites on said substrate.

26. (Withdrawn) The method of claim 25, wherein said substrate comprises a solid substrate.

27. (Withdrawn) The method of claim 25, wherein said substrate is plastic, glass, quartz, or silicon.

28. (Withdrawn) The method of claim 26, wherein said solid substrate comprises a microscope slide.

29. (Withdrawn) The method of claim 25, wherein said different amount is a serial dilution series of said compound.

30. (Withdrawn) The method of claim 25, wherein at least one of said quality control

compounds consists essentially of a compound reactive with one of said reagents, wherein said one of said reagents is a secondary reagent.

31. (Withdrawn) The method of claim 25, wherein said plurality of quality control compounds comprise at least one ligand and one of said reagents comprises a binding partner of said ligand.

32. (Withdrawn) The method of claim 31, wherein one of said reagents comprises an antibody and said ligand comprises an epitope bound by said antibody.

33. (Withdrawn) The method of claim 32, wherein said epitope comprises serum protein bound by said antibody.

34. (Withdrawn) The method of claim 31, wherein said ligand comprises biotin and one of said reagents comprises avidin.

35. (Withdrawn) The method of claim 25, wherein said plurality of quality control compounds comprise at least one detection enzyme and one of said reagents comprises a substrate of said enzyme.

36. (Withdrawn) The method of claim 25, wherein said plurality of quality control compounds comprise at least one histochemical stain control compound.

37. (Withdrawn) The method of claim 25, wherein said assessing is by measuring a detectable signal.

38. (Withdrawn) The method of claim 25, wherein said assay comprises an immune-based assay.

39. (Withdrawn) The method of claim 25, wherein said assay comprises an immunohistochemical assay.

40. (Withdrawn) The method of assessing the performance of an assay, said method comprising:

a) providing a device comprising a plurality of quality control compounds, wherein each of said control compounds is reactive with one of said reagents used in said assay; and a substrate, wherein each of said control compounds is bound on a plurality of spatially defined sites on said substrate, and wherein each of said defined sites contains a different amount of one of said control compounds;

b) performing at least one step of said assay on said substrate, wherein said substrate is contacted with at least one of said reagents; and

c) assessing a reaction of at least one of said quality control compounds and said one of said reagents.

41. (Withdrawn) The method of claim 40, wherein said assay is performed simultaneously on said device and a biological sample being assayed.

42. (Withdrawn) The method of claim 40, wherein first and second assays are performed and said method further comprises comparing said reaction in said first and second assays, whereby performances of said first and second assays are determined.

43. (Withdrawn) A method of assessing qualities of reagents used in an assay, said method comprising:

a) providing a device comprising a plurality of quality control compounds, wherein each of said control compounds is reactive with one of said reagents used in said assay; and a substrate, wherein each of said control compounds is bound on a plurality of spatially defined sites on said substrate, and wherein each of said defined sites contains a different amount of one of said control compounds;

b) performing said assay on a first said device with a first set of said reagents comprising control reagents;

d) performing said assay on a second said device with a second set of said reagents comprising test reagents; and

c) detecting reactions of said control reagents and said test reagents.

44. (Withdrawn) The method of claim 43, further comprising step d) comparing said reactions of said control reagents and said test reagents.

45. (Withdrawn) The method of claim 44, wherein said control reagents and said test reagents comprise said reagents stored for different time periods.

46. (Withdrawn) The method of claim 44, wherein said control reagents and said test reagents comprise different preparations of said reagents.

47. (New) A device for determining quality of a reagent used in an assay, comprising:

a) a target of a secondary antibody to be used in said assay; said target being bound on a first plurality of spatially defined sites on a substrate, and each of said first plurality of spatially defined sites having a different amount of said target;

b) a secondary antibody conjugate comprising said secondary antibody and a ligand to be used in said assay; said secondary antibody conjugate being bound by a linking moiety on a second plurality of spatially defined sites on said substrate, each of said second plurality of spatially defined sites having a different amount of said secondary antibody conjugate; and

c) an enzyme conjugate comprising an enzyme to be used in said assay and a binding partner specific to said ligand; said enzyme conjugate being bound by said linking moiety on a third plurality of spatially defined sites on said substrate, each of said third plurality of spatially defined sites having a different amount of said enzyme conjugate.

48. (New) The device of claim 47, wherein said target of said secondary antibody is a serum protein of an animal species.

49. (New) The device of claim 48, wherein said species is one selected from the group consisting of bovine, cat, chicken, dog, donkey, goat, guinea pig, hamster, horse, human, mouse, rabbit, rat, sheep, and swine.

50. (New) The device of claim 47, wherein said linking moiety comprises crosslinking agent, peptide, protein, nucleic acid or carbohydrate.

51. (New) The device of claim 50, wherein said linking moiety is a horse serum protein.

52. (New) The device of claim 50, wherein said protein of said linking moiety is different from said secondary antibody used in said assay.

53. (New) The device of claim 47, wherein said binding partner is avidin, or streptavidin.

54. (New) The device of claim 47, wherein said enzyme conjugate comprises horseradish peroxidase, or alkaline phosphatase.

55. (New) The device of claim 47, wherein said enzyme conjugate comprises β-galactosidase, glucose oxidase, β-glucouronidase, urease, glucose-6-phosphate dehydrogenase, or lactate dehydrogenase.

56. (New) The device of claim 47, wherein said different amount is a serial dilution series of said target, said secondary antibody conjugate, or said enzyme conjugate.

57. (New) The device of claim 47, wherein said substrate comprises aminoalkylsilane.

58. (New) The device of claim 47, wherein said substrate is attached to a solid support.

59. (New) The device of claim 58, wherein said solid support comprises a microscope slide.

60. (New) The device of claim 47, wherein said device contains an identifying code.

61. (New) The device of claim 47, wherein said assay comprises an immuno-based

assay.

62. (New) The device of claim 47, wherein said assay comprises an immunohistochemical assay.